

B1
mechanisms providing what we call "list maintenance," this involving such actions as joining, or consolidating, chains when their time separation is less than a specified value (as long as the resulting chain does not exceed the above-mentioned length limit), and otherwise increasing to an acceptable value the separation of chains which are close together and not candidates for being joined. List maintenance also includes such actions as a) maintaining the various chains as near as possible to the aforementioned maximum size and b) recovering robustly from non-anticipated interruptions, as taught in our co-pending U.S. patent application serial number 08/923,302 filed of even date herewith.--

Please replace the paragraph beginning on page 6, line 10, with the following rewritten paragraph:

B2
--Since real-time station RT1 was waiting longer, its blackburst interval is longer than that of RT2. Hence a point in time will be reached at which only RT1 is transmitting a blackburst signal. In particular, real-time station RT1's blackburst transmission ended at time t_{21} , while real-time station RT2's blackburst transmission continued beyond that point. Upon observing, at time t_{22} that it alone was transmitting a blackburst signal, real-time station RT1 stops its blackburst transmission and continues with the rest of its frame.--

Please replace the paragraph beginning on page 6, line 20, with the following rewritten paragraph:

B3
--The overall effect of having the real-time stations transmit a fixed length preamble 21 as part of the blackburst signal is to ensure that all non-real-time stations would have ceased transmission gone into a backoff mode. To this end, the duration of preamble 21 is equal to the sum of a) the aforementioned round-trip propagation delay on the medium, 2τ , and b) the duration of the conventional Ethernet jam signal. Priority will thus have been secured for real-time transmissions without suffering the disruptive effects of a pre-emptive approach. Moreover, as among the real-time stations, the use of the blackburst mechanism ensures that when (as in this embodiment) the duration of the blackburst signal is proportional to the length of time each station has been waiting

33 since it became ready to transmit, the real-time station that was the first to become ready to transmit will be the first to obtain access to the medium. Further description of the use of blackburst signals is found in our co-pending United States patent application serial no. 08/792327 filed 03/08/1996 and entitled: "A Wireless Lan Distributed Access Procedure Providing Priority For Voice Transmissions."--

Please replace the paragraph beginning on page 11, line 16, with the following rewritten paragraph:

34 --In particular, FIG. 6 shows the signals appearing the medium over a number of access periods P1 through P6, all of duration t_{access} , which occur in the order named but may be separated by other intervening access periods not shown. Each of the transmitted entities is an independent chain marked with a letter and a number, the letter identifying the chain and the number indicating its current length, i.e., the number of stations comprising the chain. Thus, for example, the notation A-3 means that chain A currently comprises three real-time stations. In a first access period, P1, the chains on the network are chains A-3, B-2 and C-2. Each of these chains is separated by some amount of time, the term "separation" being used in the present context to mean the time interval between the end of one chain and the beginning of the subsequent chain. Moreover, it is assumed that those separations remain unchanged in period P2. The separation between chains A-3 and B-2 at this time is denoted t_{i1} .--

IN THE CLAIMS

Please amend claims 1-~~12~~, ~~13~~ and 17-26 as follows:

35 1. (Amended) A contention-based communications network in which multiple linked-list chains of data packets transmitted by communications stations supported by said network at a particular point in time are not always thereafter joined into a single linked-list chain.